REMARKS

Claims 1, 2, 5 and 8 remain in this application. Claims 3, 4, 6, 7, 9 and 10 are cancelled. Claims 1, 5 and 8 have been amended. Claim 2 has been previously presented.

Applicants thank the Examiner for the detailed study of the application and prior art and note the withdrawal of the previous rejection and the new rejection of claims 1-2, 5 and 8 as unpatentable over previously cited U.S. Patent Publication No. 2001/0003092 to Sjodin in view of U.S. Patent Publication No. 2003/0138085 to Forman et al. (hereinafter "Forman").

Applicants also amend the claims to correct inconsistencies and informalities such as use of multinode instead of internode and use of communications devices instead of telecommunications devices.

Each of the independent claims are amended to recite that each node communicates with each other using a communications line without any separate signaling connection. This is substantially different from the cited Sjodin that uses a separate signaling connection as explained in paragraph 8. Sjodin sends enquiry messages over a separate connection used for signaling and then stores information received in response to messages obtained over that connection for updated location information. Each network node in Sjodin serves as a home location node and uses a distributed database for home location node functionality. The database functionality is distributed

among the network nodes when needed or on request by another node using a separate connection. This allows Sjodin to send enquiry messages to all the other network nodes over this separate signaling connection and then store the information received in the response messages. Thus, when a cordless telephone roams into an area served by another network node, then the home location node, i.e., a visited node, send an enquiry message out to all other network nodes in order to find the home location node. That enquiry message contains some information about the identity of the roaming cordless telephone. The home location node recognizes the identity information and sends a response message to the visited node and stores information about the current location into the database, which is a distributed database and shared by all nodes.

The use of the two separate communications using the PSTN (or other communications network) and the separate signaling connection 25 is shown in Sjodin in FIG. 1 reproduced below:

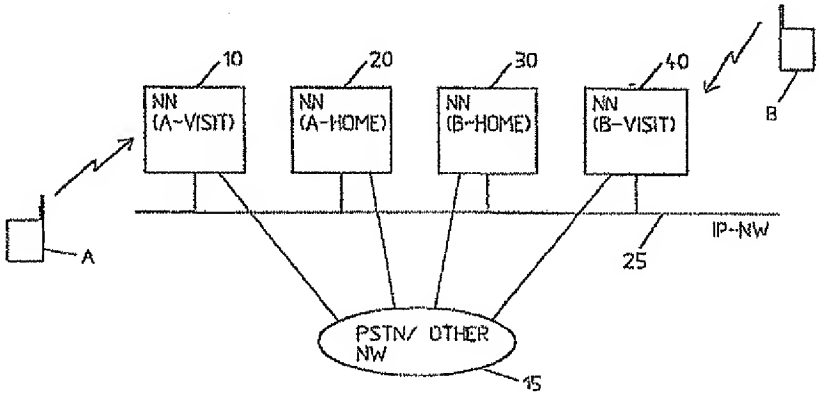

Fig. 1

The Examiner argues that Sjodin does not teach that a node is sending stored information to all the other nodes where the nodes store the same information on their databases. The Examiner views the step of storing information on one node as not equivalent to requiring a copy of dialing plan for all other nodes. Applicants wish to emphasize that Sjodin specifically uses a distributed database structure and a separate signaling communication line to update current location information into the database that is distributed among all home location nodes. This indicates that indeed the updated information is stored on all nodes through the distributed database structure.

The claimed subject matter as presented in this Amendment, however, has each respective node as a private branch exchange (PBX) platform operating as a switchboard between the PBX nodes and each having a separate dialing plan. Each node communicates with each other using a communications line, e.g., a dedicated communications line such as a T1 connection, without any separate signaling connection. Each node has a copy of the dialing plan only for its node as a (PBX) platform and no other nodes and operative to service multiple communications devices coupled to the respective node through the respective separate dialing plan for a node. In the claimed subject matter, each communication device has an extension within a respective dialing plan for a node that is used in the course of routing a call from a calling communication device to a called communication device.

The method routes a call from a calling communication device at a first node to a call device as a query target corresponding to a requested extension at another node. It includes the steps of transmitting a query message from the first node to all other nodes in the network. This query message is operative to determine whether a respective node that receives the query message is coupled to the call device as a query target. At each node, the local accounts are examined to determine if the query target at the requested extension is connected to the respective node. At a second node to which the call device is coupled, a reply message is transmitted to the first node indicating that the second node is coupled to the call device that has the queried target corresponding to the requested extension while all other nodes ignore the query message and do not transmit a reply message indicative that all other nodes do not have the queried target as the requested extension for locating or routing. In response to receipt of the reply message by the first node, the call is routed from the first node to the second node so that only the second node may complete the connection of the call to the call device without requiring a copy of the dialing plans for all other nodes.

This claimed subject matter does not require any separate signaling system as in Sjodin because there is no distributed database for use among all the nodes as in Sjodin. One skilled in the art would not look to using the Sjodin system

that requires a separate signaling communications line database and distributed database that is shared among all the nodes and form the claimed system and method presented in this Amendment.

In the Office Action, the Examiner also admits that Sjodin fails to disclose a PBX platform operating as a switchboard. In another substantial difference between Sjodin and the claimed subject matter, Sjodin includes a private microcellular communications network with home location nodes such as cellular telephones without requiring any platform such as a PBX. The PBX's are typically fixed and operate as a switchboard, as compared to the terminals in Sjodin that typically move and constantly require updated location, and thus, require a separate signaling connection among the network nodes. Sjodin reduces the amount of switching for a number of calls just for a single call. This problem is not posed by the claimed subject matter of the instant application that uses the PBX platforms, each operating as a switchboard.

There are other substantial differences between the claimed subject matter and Sjodin as explained further below.

As noted in the Background of the Invention section, and more particularly at paragraph 3, this claimed network and method overcome the drawback of using a unified dialing plan where a resource node membership can be expected to change. Since each node has a copy of a plan, any change to a node must be replicated at every other node or made to a master. Any

changes in the dialing plan, such as the updating of the plans, may also lead to out-of-date routing information, resulting in misrouted calls. The number and portability is another problem that is addressed by the claimed system and method.

The claimed network and method is not used in an update scheme for updating databases or numbers since the purpose of the claimed subject matter is to overcome the substantive problems of updating databases, which is a methodology prone to error.

The cited Sjodin is substantially different because Sjodin specifically will update based upon the Portable Unit Number (PUN) that is received within the reply message containing an authentication key. The claimed subject matter, on the other hand, does not update. Also, Sjodin uses the separate signaling connection. The claimed subject matter does not.

An example is given in paragraph 33 of Sjodin in which an enquiry message contains information about the identity of a cordless telephone A (the PUN) and the node that recognizes the PUN number answers and sends a reply message containing the authentication key of A while the other node (NN10) at the same time stores information about which node cordless telephone A currently is registered in, in this case NN10. This signal is carried over the network, and thus, provides updating, which is substantially different from what the claimed subject matter presented in this Amendment accomplishes. A call may be set up by using the enquiry message and a response, but there is still

the updating as clearly set forth in paragraph 33 of Sjodin as set forth below:

> "This means that the home location database functionality is distributed on request, when an enquiry message is sent out (broadcasted). If for example the user of cordless telephone A roams into NN 10 and NN 10 does not know which is the home location node of A, NN 10 sends an enquiry message to all the other nodes, NN 20, NN 30, NN 40 within the customer area, or within the private network, preferably/using broadcast messaging. In a particular implementation such an enquiry message contains information about the identity of cordless telephone A, particularly the Portable Unit Number (PUN). The node which then recognizes for example the PUN number, then answers and sends a reply message containing the authentication key of A. In this case it is NN 20 that recognizes e.g. the PUN number. NN 10 at the same time stores information about which node cordless telephone A currently is registered in, in this case NN 10. All this signalling is carried over the network 25."

Thus, the claimed subject matter transmits a query message from the first node to all other nodes of the network and this query message is operative to determine whether a respected node receiving the query message is coupled to the call device as a queried target. At each node, the local accounts are examined to determine if the queried target as the requested extension is connected to the respective node. At a second node to which the call device is coupled, a reply message is transmitted to the first node indicating that the second node is coupled to the call device and has the queried target corresponding to the required extension while all other nodes ignore the query message and do not transmit a reply message indicative the all other nodes do not have the queried target as the requested extension for

locating or routing. In response to receipt of the reply message by the first node, the call is routed from the first node to the second node so that the second node may complete the connection of the call to the call device without requiring a copy of dialing plans for all other nodes.

In Sjodin, information that is new about which node the cordless telephone A currently is registered in is stored as updated information as part of the distributed database shared among all nodes to give the associated new PUN and authentication key information.

Also, it should be emphasized that Sjodin is directed to a private telecommunications system using cellular telephones and ensuring home registration database updating as compared to the claimed subject matter, which is directed to the limited access multimode cooperative telecommunication network that uses the limited access internode communications network and plurality of nodes such as the PBX's that are installed in different offices of commercial, industrial and governmental enterprises and use a limited digit identification code. Thus, there is no necessity for storing this new information as in Sjodin because it is a limited access network with the new methodology and teaches against what Sjodin teaches.

Thus, Applicants contend that the claimed subject matter is novel and unobvious over Sjodin and/or combination of Sjodin and Forman as explained above.

Applicants contend that the present case in condition for allowance and respectfully requests that the Examiner issue a Notice of Allowance and issue fee due. If the Examiner has any questions or suggestions for placing the case in condition for allowance, the undersigned attorney would appreciate a telephone call.

Respectfully submitted,

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